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WHAT IS CLAIMED IS:

1. A method for producing an electric double layer capacitor, which comprises impregnating an element comprising positive and negative electrodes facing each other with a separator interposed between them, with an organic electrolyte capable of forming an electric double layer on the surface of the electrodes to store electric charge, and then applying a voltage to the element, wherein said positive and negative electrodes are made of electrodes containing a carbonaceous material having a specific surface area of from 100 to 3,000 m²/g, and said organic electrolyte contains benzene or its chlorine derivative having at least one hydrogen atom of benzene substituted by a chlorine atom.
2. The method for producing an electric double layer capacitor according to Claim 1, wherein said benzene or its chlorine derivative is at least one member selected from the group consisting of benzene, monochlorobenzene, dichlorobenzene and trichlorobenzene.
3. The method for producing an electric double layer capacitor according to Claim 1, wherein the voltage is applied to the element in a dry atmosphere in an open condition.
4. The method for producing an electric double layer capacitor according to Claim 1, wherein the benzene or its chlorine derivative is contained in an amount of from 0.1 to 30 wt% in the organic electrolyte.

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5. The method for producing an electric double layer capacitor according to Claim 1, wherein after the application of a voltage to the element, the element is maintained under reduced pressure.

6. The method for producing an electric double layer capacitor according to Claim 1, wherein the voltage is applied to the element in a dry atmosphere in an open condition, and thereafter, the element is maintained under reduced pressure.

7. The method for producing an electric double layer capacitor according to Claim 1, wherein a voltage of at least 2.5V is applied to the element at a temperature of from 15 to 85°C.

8. The method for producing an electric double layer capacitor according to Claim 1, wherein the application of a voltage to the element comprises the following steps A and B:

Step A: a step of applying a voltage across the positive and negative electrodes by a DC power source, and

Step B: a step of applying a voltage by inversely connecting the positive and negative electrodes to the DC power source as compared with step A.

9. The method for producing an electric double layer capacitor according to Claim 1, wherein the solute contained in the organic electrolyte is a salt comprising a cation represented by $R^1R^2R^3R^4N^+$ or $R^1R^2R^3R^4P^+$, wherein each

of R¹, R², R³ and R⁴ which are independent of one another, is a C₁₋₆ alkyl group or a C₆₋₁₀ aryl group, and an anion of BF₄⁻, PF₆⁻, CF₃SO₃⁻, AsF₆⁻, N(SO₂CF₃)₂⁻ or ClO₄⁻.

10. The method for producing an electric double layer capacitor according to Claim 1, wherein the organic electrolyte contains at least one solvent selected from the group consisting of ethylene carbonate, propylene carbonate, butylene carbonate, dimethyl carbonate, ethyl methyl carbonate, diethyl carbonate, sulfolane, a sulfolane derivative, acetonitrile and glutaronitrile.

11. The method for producing an electric double layer capacitor according to Claim 1, wherein after the application of a voltage to the element, the element is maintained under a reduced pressure of at most 160 Torr.

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